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SKIN DEEP

Does It ... or Doesn't It?

By NATASHA SINGER

TUCKED away on a secluded second floor in Midtown Manhattan, Ted Gibson is the kind of intimate hair salon where people feel comfortable asking stylists for personal advice. But last month, Alexandra Meyers, a British expatriate who lives in New York, found herself asking some unusual questions of her colorist, Jason Backe.

"I asked him: 'Can hair dye give you cancer or other serious illnesses? Would it be safer if I went back to being a darker color so I don't have to dye my hair as frequently?' " recalled Ms. Meyers, a natural brunette who said she has her hair fastidiously dyed blond every two weeks to cover dark roots. "I don't want to be alarmist about it, but I think you have to be sure from a health perspective about non-necessary beauty procedures."

Ms. Meyers began reconsidering her hair color last month after she saw a segment on "The View" about a new health study that found that the use of hair dye might slightly increase the risk of getting lymphoma, a group of cancers of the lymphatic system. While some epidemiologists cautioned that the findings were not cause for immediate concern, tabloid headlines like "A Look Worth Dying For" sent clients running to their stylists for reassurance.

"We've been bombarded with questions, which is unusual because normally people only ask if hair color is a health issue if they are pregnant," said Mr. Backe, a sought-after colorist whose tinting commands average fees of $500. "I sure hope that hair color doesn't give you cancer, because I am covered in it all day every day."

Set off by news of the study that was recently published in The American Journal of Epidemiology, the nationwide alarm over a possible link between hair dye and cancer underscores the disparity between medical research and its often-breathless press coverage. Television hosts like Matt Lauer of "Today" stoked fears by telling viewers that 10 percent of lymphoma cases in women may be caused by hair dye use. But, pointing to decades of research on hair dye, many epidemiologists say the new study is not cause for worry.

“If the results are true, and that’s a big if, it would mean that, in the grand scheme of life, using hair dye may present a remote risk to your health, but it would still be less risky than crossing the street, driving a car, not wearing a seat belt or drunk driving,” said Dr. Joseph K. McLaughlin, president of the International Epidemiology Institute, a biomedical research center in Rockville, Md. “But that’s a big if because no one has demonstrated that hair dye is causal for lymphoma.”

Still, the specter of cancer has factitious blondes, brunettes and redheads asking themselves whether they would be willing to fade to black or — egad — even gray. For those who view hair dye as the embodiment of their personality, youthfulness and attractiveness, the mere suggestion that the beauty treatment might be risky seemed to constitute a threat to self-image.

“For any woman who relies on hair color for creating an identity to which people respond positively by offering her jobs, dates or social approval, the notion that she might have to change her hair color is like saying you may have to throw out a piece of yourself,” said Rose Weitz, a professor of women’s studies at Arizona State University who is the author of “Rapunzel’s Daughters: What Women’s Hair Tells Us About Women’s Lives.”

Once viewed by American women as a risqué beauty treatment, hair color became popular in the 1960’s when Clairol started running ad campaigns for its home dyeing kits with slogans like: “Does she ... or doesn’t she? Hair color so natural only her hairdresser knows for sure!”

Today 54 percent of American women, aged 13 to 69, dye their hair, according to Clairol. Americans spent about $1.6 billion on at-home hair color in 2005, according to Euromonitor International, a market research firm that tracks cosmetics sales.

The alarm about hair coloring was first sounded in 1975 when Dr. Bruce N. Ames, a professor of biochemistry at the University of California, Berkeley, published a paper that found that 89 percent of the permanent hair dyes he tested caused genetic damage to bacteria. He called for further studies to look at whether the formulas could be carcinogenic to humans.

In 1979, the Food and Drug Administration asked manufacturers to put labels on hair dyes made from a suspect component that said, “Warning — Contains an ingredient that

can penetrate your skin and has been determined to cause cancer in laboratory animals." Instead, hair dye companies voluntarily removed the ingredient, a coal tar derivative, and the agency reconsidered the warning label requirement.

According to the agency's Web site, several other ingredients that may be used in hair dye formulas have been reported to cause cancer in animals and to penetrate human skin. The cosmetics industry says hair dyes are safe, while environmental groups contend they may be risky.

If there is a risk at all, studies so far show it to be small. Among several dozen hair dye studies published over the last two decades, some found no link with lymphoma. But a few studies reported that the incidence of lymphoma appeared to be greater for those with prolonged use of darker-colored permanent hair dyes (which use higher concentrations of dye and and create more of a chemical reaction than temporary blonder shades, researchers said) or who started dyeing their hair before the formulas were changed.

An analysis of 79 hair dye studies that was published last year in The Journal of the American Medical Association found that hair dye use has "no effect" on the risk of breast and bladder cancers. It did find a "borderline effect" of hair dye on the risk of lymphoma and concluded that, although dye has not been shown to cause these cancers, the link merits further investigation. The paper's authors called for further studies on hair stylists, who have more intense and frequent exposure to hair dye than consumers.

"The overall weight of scientific evidence is very convincing that hair dye is safe," said John Bailey, executive vice president for science at the Cosmetic, Toiletry and Fragrance Association, an industry trade group based in Washington. "The industry would never use ingredients having any cloud of remote concern over their safety."

The study that came out last month, however, stoked fears all over again.

For the study, researchers in Europe interviewed about 2,300 patients with lymphoma and about 2,400 people without lymphoma. The study found that those who had ever used hair dye were 1.19 times more likely to get lymphoma than those who never used it. Those who colored their hair before 1980 were 1.37 times more likely to get lymphoma.

"These are scary numbers," Ann Curry, the "Today" show co-host, warned viewers.

But many epidemiologists consider such rates of increase to be negligible.

“Compared to risk factors for other diseases, those numbers are very small,” said Dr. Barnett Kramer, associate director for disease prevention at the National Institutes of Health in Bethesda, Md. By comparison, he said, smoking makes people 10 to 60 times more likely to get lung cancer.

Because the study relies on people’s long-term memories of their grooming habits, which could be faulty, the conclusion that hair dye is linked to lymphoma might turn out to be wrong altogether, Dr. Kramer added.

Dr. Silvia de Sanjosé, a senior researcher at the Catalan Institute of Oncology in Barcelona and the lead author of the study, said in a telephone interview that people should be relieved rather than worried by her research.

“If our data is correct, we are assured that hair dye is not a major risk factor for lymphoma,” said Dr. de Sanjosé. She has been coloring her hair for five years and plans to continue, she said. “People should be happy and comforted that the observed effect is minor.”

Dr. Michael J. Thun, director of epidemiological research at the American Cancer Society in Atlanta, said that if the study proves to be correct, the results would mean that American women who start dyeing their hair might increase the risk of getting non-Hodgkin’s lymphoma from about 13.6 out of every 100,000 women per year to about 17 out of every 100,000 women per year.

“There is substantial uncertainty as to whether there is any hazard at all from hair dye,” Dr. Thun said.

Still, because so many Americans use hair dye, it is a public health issue that merits further study, said Dr. Kathy J. Helzlsouer, an epidemiology and oncology professor at Johns Hopkins University.

Certainly, many consumers are looking for greater assurance.

"I definitely got quizzed by people asking: ‘Is hair color safe? Is my hair going to kill me?’ ” said Kathy Galotti at Louis Licari salon in Manhattan. During her 24 years as a colorist, she has fielded similar questions each time new hair dye research appears, she

said. Still, “it may raise concerns, but it doesn’t seem to change people’s behavior patterns.”

Sitting in a swivel chair with her hair in foils, Margot Weinshel, a psychologist in Manhattan, agreed.

“Is this scary enough for me to stop dyeing my hair and decide to look old?” said Ms. Weinshel, 58, who has been coloring her hair monthly for the last 25 years. “Until they prove a direct link, I’m not worried about it.”

Jacki Donaldson, a blogger in Gainesville, Fla., who discusses her breast cancer on the Web site thecancerblog.com, said cancer patients may be more likely to change their routines. After seeing the hair dye segment on “Today," she decided to stop dyeing her own hair.

“I recently dyed my own post-chemo brown hair,” she blogged.

“I think I will let my artificial reddish chestnut hues fade away while I enjoy the plain brown hair that covers my once-bald scalp.”

Others like Ms. Meyers from Ted Gibson are waiting for more research before they consider returning to their natural roots.

“So many things we do on a daily basis — going on sun holidays, using chemicals, taking supplements — have risks,” Ms. Meyers said. “I’d like to see some real proof about hair dye before I change my routine.”